

7 ♂♂ mounted on slides, data same as holotype.

All the types are deposited in the collections of Zoological Survey of India, Pune for the time being.

The species is named in honour of my teacher Prof. S. N. Rao (Retd), Marathwada University, Aurangabad, who has contributed much to the knowledge of Indian gall-midges.

KEY TO INDIAN SPECIES OF *Odontodiplosis* FELT

1. Palpi triarticulate . . . . .  
     . . . . . *muirshikha* Grover & Bakshi, 1977-78  
     Palpi quadriarticulate . . . . . 2
2. Wings spotted . . . . .  
     . . . . . *punctipennis* Grover & Bakshi, 1977-78  
     Wings not spotted . . . . . 3
3. Basal clasp segment with a large obtuse basal

lobe, parameres wanting, dorsal plate bilobed, denticulate; subdorsal plate triangular; cock's comb-like projections present between subdorsal plate and aedeagus on either side . . . . .  
     . . . . . *orientalis* Sharma & Rao, 1979  
 Basal clasp segment with a small triangular basal lobe, parameres present, dorsal plate bilobed, simple, subdorsal plate entire, straight, cock's comb-like curved setae present at the middle portion of subdorsal plate on either side . . . . . *raoi* sp. nov.

ACKNOWLEDGEMENTS

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SHARMA, R. M. & RAO, S. N. (1979): *Odontodiplosis orientalis*, a new Indian gall-midge (Diptera: Cecidomyiidae). *Oriental Ins.*, 13(3-4): 299-302.

A NEW SUBSPECIES OF *SIMOCEPHALUS VIDYAE* RANE, 1983  
 (CLADOCERA, DAPHNIDAE) FROM JABALPUR,  
 MADHYA PRADESH, INDIA<sup>1</sup>

PRAMOD D. RANE<sup>2</sup>  
 (With six text-figures)

INTRODUCTION

During the study of cladocera from Madhya Pradesh, Rane (1983) described a new species *Simocephalus vidyae* from Jabalpur district. While working on other accumulated collection I came across nine specimens of the same species, which though they have main diagnostic character, i.e. very large rostrum and long

beak like front of the head also have several other characters by which they can be distinguished from *S. vidyae*. Therefore these specimens are described here as a new subspecies.

DISCRIPTION

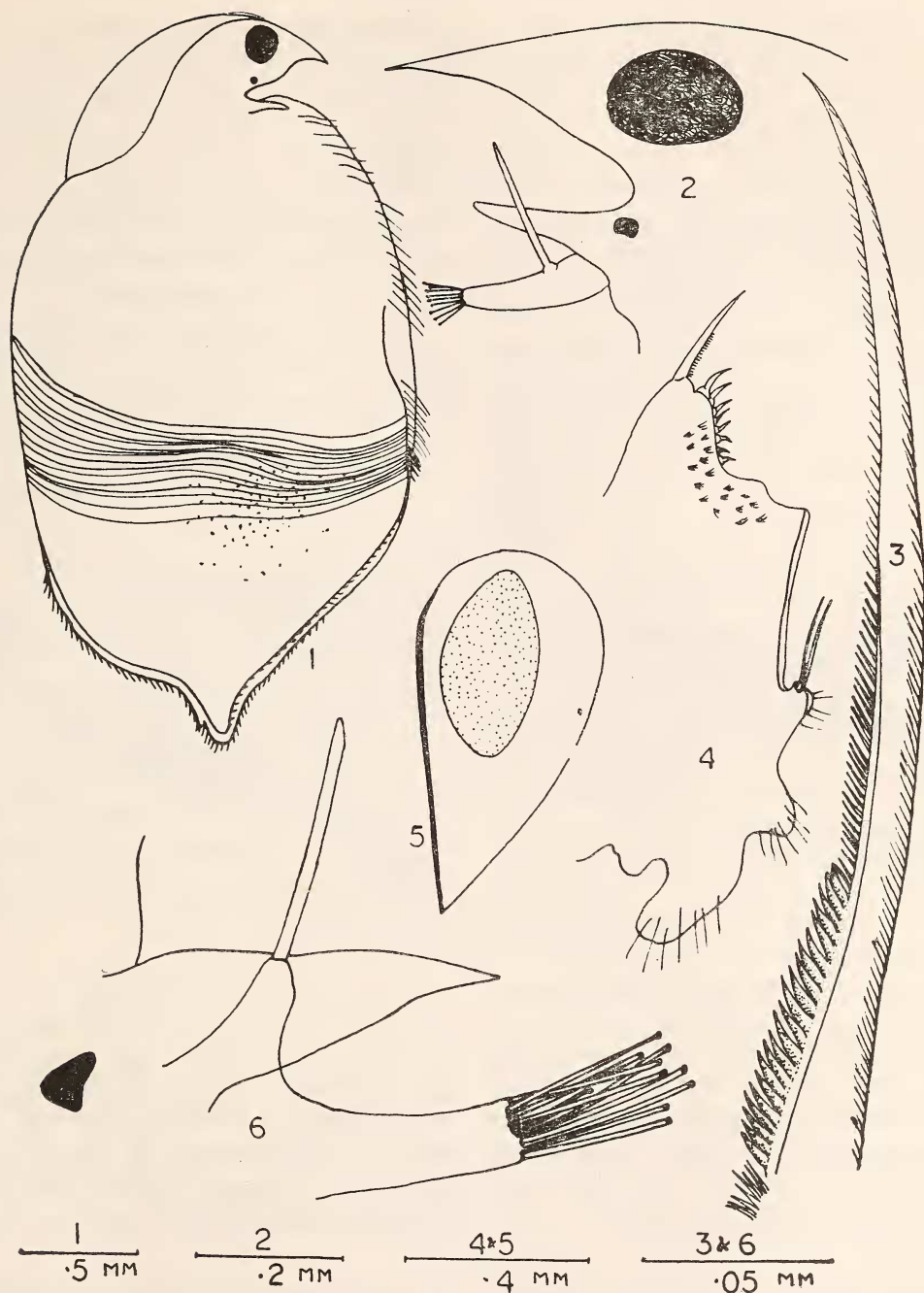
*Simocephalus vidyae* *gajareae* subsp. nov.  
 (Figs. 1-6)

*Material* — 1 ♀ (holotype) and 8 ♀♀ (paratypes), Balsager tank behind medical college, c 7 km. s/w on Shahpura Road, 18 July 1982, Jabalpur, Madhya Pradesh, India,

<sup>1</sup> Accepted June 1985.

<sup>2</sup> Zoological Survey of India, Central Regional Station, 1544, A Napier Town, Jabalpur, M.P., India.

NEW DESCRIPTIONS



Figs. 1-6. *Simocephalus vidyae gajareae* subsp. nov.

1. parthenogenetic female; 2. pointed head portion and long rostrum; 3. Claw with proximal and distal pecten; 4. postabdomen; 5. epiphial egg and 6. antennule.

coll. P. D. Rane. The types are deposited in National collection of Zoological Survey of India, Calcutta, West Bengal. (holotype, C 3482/2; paratypes, C 3483/2 and C 3484/2).

Carapace seen laterally, broadly rectangular, with large bilobed protuberance in the middle; dorsal margin almost straight and curved posterior part situated at some distance above the protuberance; hind edge of the valve straight, oblique and joining the inferior edge at an obtuse angle. One-third posterior part of the dorsal margin strongly denticulate, the denticles being continued on terminal lobed protuberance and hind edges of valve. The denticles on hinder edge are smaller than that of posterior dorsal margin. The denticles on caudal part and hind part situated very close to each other but those on the dorsal side separated by some distance. Head very prominent having fornix greatly expanded. Front of head pointed like a beak. Vertex angulate, rostral projection very large. Eye large without refractive bodies. Ocellus small, rhomboidal or sometimes triangular. Tail piece broad, with supra-anal angle slightly produced. Anal denticles about 8 on each side. Apical claws, slender and nearly straight, with proximal pecten with small 6 to 7 teeth, distal pecten with large 15 to 21 teeth and with row of fine setae distally to the distal pecten at outer margin. Inner margin of claw also with fine long setae extend from base to tip of claw. Teeth of proximal pecten straight while that of distal pecten slightly bend towards the tip of claw. Antennules of female slightly curved with large sensory hair at upper margin, arising from knob like expansion and about nine sensory setae present at the tip. Colour

blackish-green. Length of holotype female 3.3 mm, Width 2.1 mm, with about 32 developing embryos inside brood pouch. Ehippial female is smaller than parthenogenetic female. Length, 2.2 mm, with blunt protuberance and one large ehippial egg. Colour of the ehippium is light yellow which is slightly darker along circular borders. Male unknown.

#### RELATIONSHIPS

The new subspecies *Simocephalus vidyae* *gajareae* closely resembles *S. vidyae* Rane in having large rostrum and pointed beak like front of the head but can be separated on the basis of following characters: 1) Length of *S. vidyae* is 2.56 mm; while length of *S. v. gajareae* is 3.33 mm; 2) Carapace of *S. vidyae* in lateral view broadly oval and dorsal margin evenly curved while that of *S. v. gajareae* is rectangular and dorsal margin is almost straight; 3) The posterior protuberance in *S. vidyae* is small and pointed while in *S. v. gajareae* it is very large and bilobed; 4) *S. vidyae* has 13-15 straight teeth present at distal pecten while in *S. v. gajareae* there are 15-21 teeth which are slightly bent towards claw and 5) The number of developing embryos in *S. vidyae* is about 15-20 while in *S. v. gajareae* the number may reach up to 34.

#### ACKNOWLEDGEMENTS

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#### REFERENCE

- RANE, P. D. (1983): A new species of the genus *Simocephalus* Schodler, 1858 (Cladocera, Daphni-  
dae) from Madhya Pradesh, India. *Crustaceana*, 45 (2): 154-156.